

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals and no related interferences pertaining to this case.

III. STATUS OF CLAIMS

The following is a list of claims that have been presented in this matter throughout its history, and the status of those claims:

<u>Claims</u>	<u>Status</u>
1 through 20	Originally filed; subject to restriction requirement;
1 through 10	elected under restriction requirement, cancelled by subsequent amendment;
11 through 20	withdrawn due to restriction requirement;
21 through 28	added by prior amendment, subsequently cancelled by amendment; and
29 through 38	added by prior amendment, pending under final rejection, these are appealed herein and are appended hereto as Appendix A.

IV. VI. STATUS OF AMENDMENTS

There is an Amendment to the Drawings after Final Rejection filed concurrently herewith.

V. SUMMARY OF THE INVENTION

In conjunction herewith, Figure 4 is appended hereto as Exhibit B. The invention is an anchoring device used to simultaneously anchor adjacent boards to a joist or other support. The device (1) has a top element (2) with a flat horizontal top surface, with a first predetermined maximum width  $W_T$  (width-top). There is an imaginary center line through the top element (2). There is a vertical support member (4) extending downwardly from the top element (2). This vertical support member (4) has a second predetermined maximum width  $W_M$  (width middle). Below the vertical support member (4) is a bottom element (6) that has a trapezoidal shape with a flat bottom. Bottom element (6) has a predetermined maximum width  $W_B$  (width-bottom). A critical feature of the present invention is the flat bottom, as it rests on a joist or other beam, and boards with slits or cuts are slid onto the left and right portions of the top element (2). The trapezoidal side profile of the bottom element provides a low, tapered edge for the particular boards that are used

with this device (typically, custom extruded synthetic decking with rounded edges). Another critical feature of the present invention device is the relationships of the widths of the various elements of the device. It is critical that the width  $W_T$  of the top element (2) be greater than both the width  $W_M$  of the support element (4) and the width  $W_B$  of the bottom element (6). Furthermore, the width of the bottom element (6) is required to be greater than the width of the support element (4). In other words, the top is the widest, the middle is the narrowest, and the bottom width is less than the top and greater than the middle. Without these critical features structurally set forth in all appealed claims, the device will not function for its intended purpose.

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 29 through 38 are directed to the present invention with novel details set forth in the main and dependent claims. Claims 29 and 33 are main claims. For purposes of the appeal, the groups are claims 29 through 32 representing an anchoring device, and claims 33 through 38 representing a decking system. The grounds of rejection and basic issues are as follows:

(a) The Examiner has stated that claims 29, 31 and 32 are anticipated by GB 1,350,754, under U.S.C. §102(b). It is asserted that the GB 1,350,754 patent teaches all of the present invention claim limitations including a top having a top width, a bottom having a generally trapezoidal shape and a bottom width, and a support member attached to an underside of the top having a support width. The top width is greater than the support member width and the bottom width. The bottom width is greater than the support width. Regarding claim 31, the Examiner stated that GB 1,350,754 teaches two sides of the top as being symmetric relative to one another. Regarding claim 32, the Examiner stated that GB 1,350,754 teaches two sides of the top and being parallel to one another. Are claims 29, 31 and 32 rendered anticipated by GB 1,350,754?

(b) The Examiner has stated that claims 33, and 35 through 38 are anticipated by Chen et al. 6,363,677, under U.S.C. §102(e). It is

asserted that the Chen et al. patent teaches all of the present invention claim limitations including a top having sides, which includes at least one groove. The relationship between a top width, a bottom width and a support member width is as described in section (a) immediately above. Regarding claim 35, the Examiner stated that Chen et al. teach two sides of the top as being symmetric relative to one another. Regarding claim 36, the Examiner stated that Chen et al. teach wherein a groove establishes an upper half and a lower half of the board in which the width of the upper half is greater than the width of the lower half. Regarding claim 37, the Examiner stated that the Chen et al. patent teaches that the boards are made from the group consisting of synthetic polymers, at least partially foamed synthetic polymers, wood, wood composite and combinations thereof. Regarding claim 38, the Examiner stated that Chen et al. teach two sides of the top and being parallel to one another. Are

claims 33, and 35 through 38 rendered anticipated by Chen et al.?

- (c) The Examiner has stated that claim 29 is rendered obvious as being unpatentable over Fisher et al. 5,704,181, under U.S.C. §103(a). It is asserted that the Fisher et al. patent teaches all of the present invention claim limitations with the exception that the device is made of molded plastic material. The Examiner reminded the Applicant that selecting a known material on the basis of its suitability for the intended use is a matter of obvious design choice. The Examiner concluded that it would have been obvious to one having ordinary skill in the art to make the device of plastic. The Examiner further asserted that plastic material is capable of having a metal fastener driven through it. Is claim 29 rendered obvious by Fisher et al.?

- (d) The Examiner has stated that claim 30 is rendered obvious as being unpatentable over

Fisher et al. 5,704,181, and in further view of Naccarato et al., under U.S.C. §103(a). It is asserted that the Fisher et al. patent fails to disclose the vertical support member having recesses with support columns located therebetween. The Examiner stated that Naccarato et al. teach a vertical support member having recesses to promote optimal flow of grout material through the support member. He concluded it would have been obvious to one having ordinary skill in the art to include recesses in the vertical support member. The Examiner reminded the Applicant that columns are inherently located between the recesses as shown in Figure 3 of Naccarato et al. Is claim 30 rendered obvious by Fisher et al., in view of Naccarato et al.?

- (e) The Examiner has stated that claim 33 is rendered obvious as being unpatentable over Major 556,998, in view of Fisher et al. 5,704,181, under U.S.C. §103(a). It is asserted that the Major patent teaches all of



the present invention claim limitations with the exception that the bottom element has a generally trapezoidal shape and the anchoring device is made of molded plastic material. The Examiner asserted that Fisher et al. teach a bottom element consisting essentially of a trapezoidal shape. Furthermore, the Examiner asserted that selecting a known material for suitability for the intended use is a matter of obvious design choice. The Examiner concluded that it would have been obvious to one having ordinary skill in the art to include the trapezoidal shaped bottom element as taught by Fisher et al. and to make the device of plastic. Is claim 33 rendered obvious by Major, in view of Fisher et al.?

- (f) The Examiner has stated that claim 34 is rendered obvious as being unpatentable over Major 556,998, in view of Fisher et al. 5,704,181, and further in view of Naccarato et al. 6,442,908, under U.S.C. §103(a). It is asserted that Major and Fisher et al. fails to

disclose the vertical support member having recesses with support columns located therebetween. The Examiner stated that Naccarato et al. teach a vertical support member having recesses to promote optimal flow of grout material through the support member. He concluded it would have been obvious to one having ordinary skill in the art to include recesses in the vertical support member. The Examiner reminded the Applicant that columns are inherently located between the recesses as shown in Figure 3 of Naccarato et al. Is claim 34 rendered obvious by Major and Fisher et al., in further view of Naccarato et al.?

#### VIII. ARGUMENTS

##### Claims 29, 31 and 32 Rejected under 35 USC 102(b) on GB1,350,754

The Applicant respectfully submits that the British Patent 1,350,754 (hereinafter "GBP") does not present a case of anticipation for the following reasons. First, the GBP reference is non-analogous art. Second, the GBP disclosure has a structure that is different from the present invention. And

third, the placement of the bottom and the top is inverted with respect to the present invention.

First, the GBP reference is non-analogous art. The GBP relates to pre-formed grouting strips for mounting tiles. This is different from an anchoring device for joining boards of the present invention. The material of the strips in the GBP provides the adherence to the tiles. In contrast to this, the present invention physical structure provides the anchoring mechanism. The Applicant respectfully submits that one skilled in the art of wood and simulated wood decks would not look to the art of tile mounting by grout for information on how to construct an anchor for wood.

Second, the GBP disclosure has a structure that is different from the present invention. With reference to Fig. 9 of the GBP, grouting strips 19 are illustrated as three separate linear strips wherein a middle strip forms a "T" projection. Furthermore, as shown in Fig. 10 as marked up by the Examiner, the vertical support member A20 is one and the same as the top element A10. In contrast to this, the present invention includes a vertical

support member attached to an underside of a top element.

And third, the placement of the bottom and the top is inverted with respect to the present invention. The GBP teaches seal strips for grouting that has a bottom that is wider than its top, the exact opposite of the present invention as claimed, and the strip does not consist essentially of a bottom element having two sides with a flat bottom and sides with a trapezoidal shape. In fact, the GBP has a plurality of strips 19 on its bottom for providing seatings for the margins of the tiles. These are essential elements of the GBP device and are not claimed in the present invention.

For all of the above reasons, the Applicant respectfully submits that the GBP rejection should be withdrawn.

**II. Claims 33 and 35-38 rejected under  
35 USC 102(e) on Chen et al.**

The Applicant respectfully submits that the Chen et al. patent 6,363,677 does not present a case of anticipation for the following reasons. First, the Chen et al. patent is non-analogous art.

Second, the Chen et al. disclosure is different from the present invention. And third, the dimension of the middle section teaches away from the present invention.

First, the Chen et al. patent is non-analogous art. The Chen et al. reference describes a tiling system with splines, and illustrates splines that have two components. The Chen et al. item is not an anchoring device, and does not connect two adjacent boards and a joist. The Applicant respectfully submits that one skilled in the art of wood and simulated wood decks would not look to the art of tiling systems with splines for information on how to construct an anchor for wood.

Second, the Chen et al. disclosure is different from the present invention. Even if these splines are inverted, as implied by the Examiner's discussion, but not shown as such in the illustration, the result is completely opposite the claimed present invention anchor. Critically, the present invention device has a widest top, a narrowest middle and a bottom in between. Further, the Applicant respectfully disagrees with the

Examiner's designating of top in his marked up Fig. 10 of Chen et al. As claimed in the present invention, the anchoring device includes a top. As defined by the Examiner, the top A21 is shown on a tile, and not part of the anchor. The Applicant respectfully submits that the top would be the top extension of the anchor device A26, as viewing Fig. 10 inverted. In that case, the top width would be the smallest of the three defined widths, not the largest, as claimed.

Furthermore, from the Applicant's view, the middle support section is the fullest width of A5, which is the Examiner's claimed top width A3. Thus, Chen et al. also discloses a widest middle width, in contrast to the present invention smallest middle width.

Moreover, the Chen et al. reference does not have a bottom with the claimed shape set forth in the present invention claims. Its top has some relative shape, but lacks the dimensional relationships claimed in the present invention. There are no trapezoidal walls and bottom to its bottom element as in the present invention. Thus,

the Chen et al. disclosure lacks features of the present invention.

And third, the dimension of the middle section teaches away from the present invention. Whether upside down or inverted, the Chen et al. device does not have a middle section between the top and the bottom that consists essentially of a width that is less than the widths of both the top and bottom, as claimed and expanded upon in the second paragraph herein immediately above.

Thus, for all the reasons above, the Chen et al. reference is totally lacking in any similarity with the claimed invention. For these reasons, the Applicant respectfully submits that the Chen et al. reference rejection should be withdrawn.

**III. Claim 29 Rejected under 35 USC 103(a)**  
**based on Fisher et al.**

The Applicant respectfully submits that the Fisher et al. patent 5,704,801 does not present a case of obviousness for the following reasons. First, the Fisher et al. patent is non-analogous art. Second, the Fisher et al. disclosure is different from the present invention. And third,

the Fisher et al reference teaches away from the present invention.

First, the Fisher et al. patent is non-analogous art. The Applicant respectfully submits that one of ordinary skill in the field of wood and simulated wood decks would not look to the steel beam areas of concrete and steel building construction of Fisher et al. for information on how to construct anchors. The types of material joining wood be different from joining steel.

Second, the Fisher et al. disclosure is different from the present invention. The Fisher et al. device is a steel dissymmetric beam for horizontal insertion between other steel beams, with concrete or other grouting being interspersed for its formation. Thus, there is not any teaching of a device for anchoring wood and simulated wood decks of the present invention.

And third, the Fisher et al. reference teaches away from the present invention. The present invention consists essentially of a plastic molded item, as a fastener must be easily passed through it to anchor it to a joist, whereas the Fisher et al.



reference is directed to an opposite purpose, namely keep the integrity of the device and embed it in concrete or other hardener to support the structures taught therein. Further, the Fisher et al. device must be made of steel or it will fail. It is specifically taught to be steel and no doubt would fail if it were anything less.

Thus, for all of the above reasons, Fisher et al. uses a different device for a different purpose with a different result. Thus, the Applicant respectfully submits that the rejection should be withdrawn.

**IV. Claim 30 Rejected under 35 USC 103(a) over Fisher et al. in view of Naccarato et al.**

The rejection based on these two references has all of the deficiencies as to Fisher et al as set forth above in Section III, and these arguments are here repeated and incorporated herein by reference and preserved for purposes of appeal. In addition, the combination with Naccarato et al. patent 6,442,908 does not present a case of obviousness because the Naccarato et al. reference lacks a

feature of the present invention and also teaches away from the present invention.

The Naccarato et al. reference lacks a feature of the present invention. The secondary reference to Naccarato et al. does not teach that deck anchoring devices should have recesses with columns. Although the Naccarato et al. disclosure teaches recesses, it does not teach support columns. Webster's Ninth New Collegiate Dictionary defines column as "a supporting pillar, one consisting of a usually round shaft, a capital and a base." The present invention support columns 19 are described by the aforesaid definition. Clearly, however, the spaces between the grooves 24 of Fig. 5 of Naccarato et al. have a generally trapezoidal shape, which is not the same as a column, by definition.

The Naccarato et al. fastener is a teaching away from the present invention device as it lacks all of the shape elements of which the present invention essentially consists. Further, even if Naccarato et al. taught everything that the Examiner asserts, it still would not overcome the shortcomings of the Fisher et al. patent.

For all of the above reasons, the Applicant respectfully submits that this rejection should be withdrawn.

**V. Claim 33 rejected under 35 USC 103(a) over Major in view of Fisher et al.**

The reference to Major describes a floor connecting element that does not involve a support board (joist). Furthermore, the bottom A9 as detailed by the Examiner in Fig. 1 does not have a trapezoidal section nor does it have a single width section relationship as set forth in all of the claims. The secondary reference to Fisher et al. is lacking to overcome the deficiencies for all of the reasons discussed above herein in Section III relating to that reference, and which arguments are repeated here, incorporated by reference herein.

For all of the above reasons, the Applicant respectfully submits that the combination of Major in view of Fisher et al. should be withdrawn.

**VI. Claim 34 Rejected under 35 USC 103(a) over Major in view of Fisher et al. and further in view of Naccarato et al.**

All of the primary reference to Major, and the secondary reference to Fisher et al, comments,

deficiencies, and arguments discussed everywhere above relating to those references in combination and separately, are repeated here, and incorporated by reference herein. Likewise, all of the comments, deficiencies and arguments to Naccarato et al are repeated here, incorporated by reference herein, and preserved for purposes of appeal.

The secondary reference to Fisher et al. does not overcome the shortcomings of the primary reference to Major, and the tertiary reference to Naccarato et al. does not overcome the shortcomings of the primary and secondary references to Major and Fisher et al., respectfully.

Further, their combination is not possible because of the conflicting physical arrangements of each. The top width, middle width and bottom width relationships are in different orders in the underlying references cited. Further, Fisher et al. and Naccarato et al. relate to steel beams while Major relates to ventilated flooring. Thus, the references cited are non-analogous art in comparison to wood and simulated wood decks of the present invention. Moreover, there is no motivation to

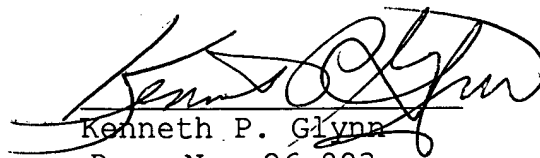
combine the references. Finally, even if the combination is possible, the results are different from the present invention and lack the essential elements of which the present invention consists.

### CONCLUSION

For all of the above reasons, it is urged that the newly presented claims 29 through 38 are neither taught nor obvious over the cited references, and should be allowed. Based upon the above arguments, the Applicant believes that it should be clear to the Board of Appeals that the currently pending Claims 29 through 38 are allowable over the 35 U.S.C. §102 and 35 U.S.C. §103 rejections. The rejections under should be reversed.

Thank you.

Respectfully submitted,



Kenneth P. Glynn  
Reg. No. 26,893  
Attorney for Applicant  
24 Mine Street  
Flemington, NJ 08822  
(908) 788-0077 Tele  
(908) 788-3999 Fax

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Cc: Glen Eberle  
Express Mail ER 416519718 US

APPENDIX A  
The Appealed Claims

29. An anchoring device for joining three boards, which consists essentially of:

(a) a substantially flat horizontal top element having a top view configuration which includes two sides and has a first predetermined width as measured side to side, said first predetermined width being measured at a maximum width between said two sides, said top element having an imaginary center line;

(b) at least one substantially vertical support member attached to an underside of said top element along said imaginary center line of said top element and extending downwardly therefrom for a predetermined length, said substantially vertical support member having two sides and a second predetermined width as measured side to side at a maximum width; and,

(c) a substantially flat horizontal bottom element having a flat bottom view configuration which includes two sides and having a generally

trapezoidal shape, and having a third predetermined width as measured side to side at a maximum width at a trapezoidal base;

wherein said first predetermined width is greater than both said second predetermined width and third predetermined width, and wherein said third predetermined width is greater than said second predetermined width, and said anchoring device is adapted to maintain said top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position said bottom element upon a support board which said two adjacent boards rest for attachment of said anchoring device to said support board for anchoring and support of said two adjacent boards; and,

further wherein said device is made of molded plastic material capable of having a metal fastener driven therethrough.

30. The anchoring device of claim 29 wherein said vertical support member has a plurality of recesses with support columns located therebetween.

31. The anchoring device of claim 29 wherein said top element two sides are symmetric relative to one another.

32. The anchoring device of claim 29 wherein said top element two sides are parallel to one another.

33. A decking system which comprises:

I. a plurality of decking boards, each decking board having a top, a bottom, two sides, and two ends, and at least one groove located along one of said sides, said groove adapted to receive an anchoring device; and

II. an anchoring device which consists essentially of:

(a) a substantially flat horizontal top element having a top view configuration which includes two sides and has a first predetermined width as measured side to side, said first predetermined width being measured a maximum width between said sides, said top element having an imaginary center line;



(b) at least one substantially vertical support member attached to an underside of said top element along said imaginary center line of said top element and extending downwardly therefrom for a predetermined length, said substantially vertical support member having two sides and a second predetermined width as measured side to side at its maximum width; and

(c) a substantially flat horizontal bottom element having a flat bottom view configuration which includes two sides and having a generally trapezoidal shape, and having a third predetermined width as measured side to side at its maximum width at a trapezoidal base;

wherein said first predetermined width is greater than both said second predetermined width and third predetermined width, and wherein said third predetermined width is greater than said second predetermined width, and said anchoring device is adapted to maintain said top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position said bottom element

upon a support board which said two adjacent boards rest for attachment of said anchoring device to said support board for anchoring and support of said two adjacent boards; and,

further wherein said anchoring device is made of molded plastic material capable of having a metal fastener driven therethrough.

34. The decking system of claim 33 wherein said vertical support member of said anchoring device has a plurality of recesses with support columns located therebetween.

35. The decking system of claim 33 wherein said top element two sides are symmetric relative to one another.

36. The decking system of claim 33 wherein said groove establishes an upper half of each said board above said groove and a lower half of each said board below said groove, wherein said upper half has a greater width than said lower half.

37. The decking system of claim 33 wherein said plurality of decking boards are made of materials selected from the group consisting of synthetic polymers, at least partially foamed synthetic polymers, wood, wood composite, and combinations thereof.

38. The decking system of claim 33 wherein said top element two sides are parallel to one another.



APPENDIX B

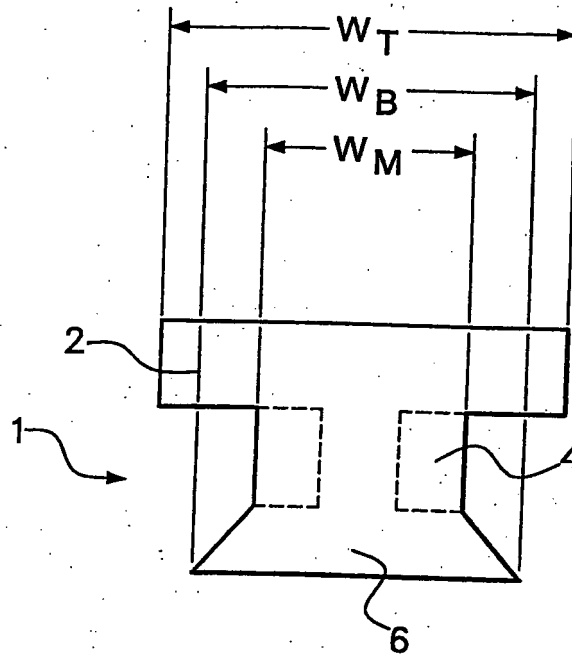


Fig. 4